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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/500,056

06/23/2004

Jari Sirvio

AWEK 2881

9131

7812 7590 04/17/2007
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EXAMINER

SOTELO, JESUS D

ART UNIT

PAPER NUMBER

3617

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/17/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No. 10/500,056	Applicant(s) SIRVIO ET AL.	
	Examiner Jesús D. Sotelo	Art Unit 3617	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 8-13 and 15-18 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 8-13 and 15-18 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|--|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

DETAILED ACTION

1. Claims 8-13 and 15-18 are in the application. Claims 1-7 and 14 have been cancelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 8-13 and 16-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tigges et al (CA 2,373,462) in view of Oshima (JP9-142391).

Tigges et al discloses a watercraft having an aft region and first and second opposite sides (shown particularly in figure 2), and comprising a hull having a cargo deck (shown in figures 2 and 3); the cargo deck defines a cargo space for accommodating trucks and other wheeled cargo, as shown in figures 2 and 3. The hull also includes a main propulsion means 6 located in the aft region of the watercraft for propelling the craft in a forward direction.

Oshima discloses a ship including a hull with opposite sides and a main propulsion unit driving a main propeller 1. Oshima teaches different configurations for steering the watercraft including, as shown in figures 1-3, the use of a main fixed propeller and two rotatable steering propulsion units located in the aft region of the watercraft to the first and second sides of the main propulsion means 1. In view of these disclosures, it would have been obvious to one having ordinary skill in the art at the time of the invention to substitute for the propulsion/steering means in Tigges with an arrangement including a main propulsion means located in the aft region of the

Art Unit: 3617

watercraft for propelling the watercraft in a forward direction and first and second steering propulsion devices located in the aft region of the watercraft to the first and second sides of the main propulsion means generally as taught by Oshima. The steering propulsion devices mounted on the watercraft of Tigges et al per the teachings of Oshima would of necessity be mounted below the cargo deck. While Oshima does not specify the shaft output of the steering units relative to the main propulsion unit, it is reasonable to expect the shaft output of the steering units to be less than that of the main propulsion unit judging from the relative size of the propellers and the intended function of the two different units. The amount of the difference between the shaft output and the main propeller shaft output is deemed to have been an obvious matter of design choice to one having ordinary skill in the art of marine propulsion and steering at the time of the invention. The steering propulsion devices of Oshima include a propeller part that is stationarily located (when not in use) outside the hull of the watercraft, generally as in claim 9. It should be noted that when the propeller of the steering propulsion devices claimed is in use, none of the parts of the propeller are stationarily, as the whole propeller would be rotating. The propulsion means in the above combination includes a propeller, as in claim 10. The main propulsion means in the above combination would have the main propulsion means located substantially centrally between the opposite sides of the watercraft generally as shown in figures 1 and 2, as in claim 11. Although the figures in the disclosure of Oshima do not show a prime mover, it is obvious and conventional for propulsion units in watercraft to include a prime mover, as in claim 12 and the type of prime mover is deemed to have been an obvious matter of choice to one having ordinary skill in the art at the time of the invention. The use of electric motors, diesel motors and gas turbines to drive ships is well known in the art. Similarly, the

Art Unit: 3617

provision of a maintenance space below the cargo space for maintaining the steering propulsion devices would have been an obvious matter of design choice to one having ordinary skill in the art at the time of the invention. Although the steering propellers could be maintained from the outside, such maintenance would require special personnel or equipment, while the use of access panels through the hull would be a desirable feature.

The method steps of claims 16 and 17 are encompassed in the above combination.

Response to Arguments

4. Applicant's arguments filed 1/30/2007 have been fully considered but they are not persuasive.
5. Applicant's argument that Oshima does not teach that a watercraft should be provided with a main propulsion means located in the aft region of the watercraft and first and second steering devices is not understood. Clearly the reference shows this structure in figures 1, 3, and 5. The disclosure of the invention of Oshima is not limited to what problem Oshima's invention solves. In this particular instance, the problem solved by Oshima is secondary. The reference of Oshima is taken for everything it teaches. And one of the concepts it teaches is the provision of a marine vessel with a main propulsion unit 1 and two steering propellers mounted on opposite sides of the main propulsion unit.
6. Applicant argues that the arguments presented by the examiner are silent with respect to motivation. The prosecution of this application has been so extensive that perhaps such motivation was not specifically stated. The motivation, however, is very clear. The use of auxiliary steering propellers in combination with a main propulsion unit would have been desirable to provide more positive steering of the watercraft.

Art Unit: 3617

7. Applicant's argument with respect to claim 16 is really misdirected. The Oshima reference clearly shows an arrangement in figures 1 and 2 where there is a main propulsion unit 1 and two steering propellers 3. There is no way that the main propulsion unit can assist in steering the vessel. Applicant's description of the arrangement in figures 4 and 6 is also erroneous. The propeller 1 is not used for steering. In this embodiment a rudder 4 is used.

8. The second declaration of Mr. Karl Hamberg has been carefully considered. As to the combination of references, Mr. Hamberg presents his opinion which is not that much different from applicant.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

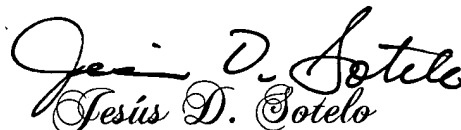
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jesús D. Sotelo whose telephone number is 571-272-6686. The examiner can normally be reached on Mon. – Fri. 5:30 AM – 2:00 PM.

Art Unit: 3617

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Samuel J. Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink that reads "Jesus D. Sotelo". The signature is written in a cursive, flowing style.

Primary Examiner
Art unit 3617
KNX 03D69 ☺

jds
April 13, 2007